

111TH CONGRESS
2D SESSION

H. R. 5674

To amend the Clean Air Act to require reductions in mercury emissions from electric utility steam generating units, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JULY 1, 2010

Mr. COSTA introduced the following bill; which was referred to the Committee on Energy and Commerce

A BILL

To amend the Clean Air Act to require reductions in mercury emissions from electric utility steam generating units, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Mercury Reduction
5 and Energy Security Act of 2010”.

6 **SEC. 2. FINDINGS AND PURPOSE.**

7 (a) FINDINGS.—Congress finds the following:

8 (1) The Environmental Protection Agency
9 (“EPA”) was required by the terms of the Clean Air
10 Act Amendments of 1990 and a 1998 consent agree-

1 ment to determine whether regulation of mercury
2 from electric utility steam generating units under
3 section 112 of the Clean Air Act was appropriate
4 and necessary.

5 (2) In a December 2000, regulatory finding, the
6 EPA concluded that regulation of mercury from
7 electric utility steam generating units was appro-
8 priate and necessary.

9 (3) In 2005, the EPA withdrew its 2000 regu-
10 latory finding in favor of a national cap-and-trade
11 system for mercury emissions from electric utility
12 steam generating units, the Clean Air Mercury Rule
13 (“CAMR”).

14 (4) CAMR was subsequently challenged in peti-
15 tions for review filed by 17 States.

16 (5) The United States Court of Appeals for the
17 District of Columbia Circuit vacated the rule on
18 February 8, 2008, finding that once the EPA had
19 listed electric utility steam generating units as a
20 source of hazardous air pollutants, it was required
21 by law to proceed with Maximum Achievable Control
22 Technology (“MACT”) regulations under section
23 112 of the Clean Air Act unless it delisted the
24 source category, under procedures set forth in sec-
25 tion 112(c)(9).

1 (6) Mercury control technologies for coal-fired
2 electric utility steam generating units have advanced
3 rapidly in the last few years.

4 (b) PURPOSE.—The purpose of this Act is to protect
5 public health and welfare, and the environment, through
6 mercury emission reductions from electric utility steam
7 generating units.

8 **SEC. 3. MERCURY EMISSION REDUCTIONS.**

9 The Clean Air Act (42 U.S.C. 7401 et seq.) is amend-
10 ed by adding at the end the following new title:

11 **“TITLE VII—MERCURY**
12 **REDUCTIONS**

13 **“SEC. 701. DEFINITIONS.**

14 “In this title:

15 “(1) AFFECTED UNIT.—The term ‘affected
16 unit’ means a coal-fired electric steam generating
17 unit (including a cogeneration unit) that—

18 “(A) has a nameplate capacity greater
19 than 25 megawatts; and

20 “(B) generates electricity for sale.

21 “(2) COGENERATION UNIT.—The term ‘cogen-
22 eration unit’ means a stationary, coal-fired boiler or
23 a stationary, coal-fired combustion turbine having
24 equipment used to produce electricity and useful
25 thermal energy for industrial, commercial, heating,

1 or cooling purposes through the sequential use of en-
2 ergy that produces during the 12-month period
3 starting on the date the unit first produces elec-
4 tricity and during any calendar year after which the
5 unit first produces electricity—

6 “(A) for a topping-cycle cogeneration
7 unit—

8 “(i) useful thermal energy not less
9 than 5 percent of total energy output; and

10 “(ii) useful power that, when added to
11 one-half of useful thermal energy pro-
12 duced, is not less than—

13 “(I) 42.5 percent of total energy
14 input if useful thermal energy pro-
15 duced is 15 percent or more of total
16 energy output; or

17 “(II) 45 percent of total energy
18 input if useful thermal energy pro-
19 duced is less than 15 percent of total
20 energy output; and

21 “(B) for a bottoming-cycle cogeneration
22 unit, useful power not less than 45 percent of
23 total energy input.

24 “(3) INLET MERCURY.—The term ‘inlet mer-
25 cury’ means the quantity of mercury found—

1 “(A) in the as-fired coal used by an af-
2 fected unit; or

3 “(B) for an affected unit using coal that is
4 subjected to an advanced coal cleaning tech-
5 nology, in the as-mined coal used by the af-
6 fected unit.

7 **“SEC. 702. MERCURY REDUCTION PROGRAM.**

8 “(a) ANNUAL LIMITATION FOR AFFECTED UNITS.—
9 Except as provided in subsection (f), an affected unit in
10 operation before or after the date of enactment of this title
11 shall be subject to the following emission limitations on
12 an annual average calendar year basis with respect to mer-
13 cury:

14 “(1) CALENDAR YEARS 2012 THROUGH 2014.—
15 For the period beginning on January 1, 2012, and
16 ending on December 31, 2014, the less stringent
17 limitation of the following (calculated on a one-year
18 rolling average):

19 “(A) 80 percent capture of inlet mercury.

20 “(B) An emission rate of 1.60 pounds of
21 mercury per trillion British thermal units of
22 input coal.

23 “(2) CALENDAR YEAR 2015 AND THERE-
24 AFTER.—For calendar year 2015 and each calendar

1 year thereafter, the less stringent limitation of the
2 following (calculated on a one-year rolling average):

3 “(A) 90 percent capture of inlet mercury.

4 “(B) An emission rate of 0.80 pounds of
5 mercury per trillion British thermal units of
6 input coal.

7 “(b) AVERAGING ACROSS UNITS WITHIN A FACILITY
8 OR STATE.—(1) An owner or operator of more than one
9 affected unit at a single facility may demonstrate compli-
10 ance with the applicable annual average emission limita-
11 tions under subsection (a) by averaging emissions from all
12 affected units at that facility, weighted by total input coal
13 British thermal units.

14 “(2) An owner or operator of more than one affected
15 unit or units within a State may demonstrate compliance
16 with the applicable annual average emission limitations
17 under subsection (a) by averaging emissions from all af-
18 fected units owned or operated by that owner or operator
19 within such State, weighted by total input coal British
20 thermal units, if all affected units are owned or operated
21 by the same entity.

22 “(3) If an affected unit is owned or operated by more
23 than one entity, the State in which the affected unit is
24 located shall allocate to each such owner or operator an
25 appropriate portion of the generation from the affected

1 unit for purposes of averaging emissions pursuant to para-
2 graph (1) or (2).

3 “(c) REFERENCE METHODS FOR MEASURING MER-
4 CURY EMISSIONS.—(1) The owner or operator of an af-
5 fected unit shall use any of the following methods as a
6 reference method to calibrate the instruments used to
7 measure the mercury concentration in emissions from af-
8 fected units:

9 “(A) ASTM D6784–02, ‘Standard Test
10 Method for Elemental, Oxidized, Particle-
11 Bound and Total Mercury in Flue Gas Gen-
12 erated from Coal-Fired Stationary Sources’
13 (Ontario Hydro Method).

14 “(B) 40 C.F.R. Part 60, Appendix A–8,
15 Method 29, ‘Determination of Metals Emissions
16 from Stationary Sources’.

17 “(C) 40 C.F.R. Part 60, Appendix A–8,
18 Method 30A, ‘Determination of Total Vapor
19 Phase Mercury Emissions from Stationary
20 Sources (Instrumental Analyzer Procedure)’.

21 “(D) 40 C.F.R. Part 60, Appendix A–8,
22 Method 30B, ‘Determination of Total Vapor
23 Phase Mercury Emissions from Coal-Fired
24 Combustion Sources Using Carbon Sorbent
25 Traps’.

1 “(2) The Administrator may revise or supplement the
2 list of permitted methods set forth in paragraph (1) to
3 reflect improvements or other developments in the meas-
4 urement of mercury emissions from coal-fired electric
5 steam generating units.

6 “(d) MONITORING SYSTEM.—(1) The owner or oper-
7 ator of an affected unit shall install and operate a contin-
8 uous emissions monitoring system (CEMS) to measure the
9 quantity of mercury that is emitted from each affected
10 unit.

11 “(2) For purposes of complying with paragraph (1),
12 the owner or operator of an affected unit may use—

13 “(A) any CEMS that meets the requirements in
14 Performance Specification 12A (PS-12A), ‘Speci-
15 fications and Test Procedures for Total Vapor-Phase
16 Mercury Continuous Monitoring Systems in Sta-
17 tionary Sources’;

18 “(B) a mercury concentration CEMS that
19 meets the requirements of 40 C.F.R. Part 75; or

20 “(C) a sorbent trap monitoring system that
21 meets the requirements of 40 C.F.R. 75.15 and 40
22 C.F.R. Part 75, Appendix K, ‘Quality Assurance
23 and Operating Procedures for Sorbent Trap Moni-
24 toring Systems’;

1 “(3) The Administrator may revise or supple-
2 ment the list of permitted monitoring systems set
3 forth in paragraph (2) to reflect improvements or
4 other developments in mercury emissions reduction
5 technologies and mercury emissions monitoring sys-
6 tems.

7 “(e) EXCESS EMISSIONS.—(1) Except as provided in
8 subsection (f), the owner or operator of an affected unit
9 that emits mercury in excess of the applicable annual aver-
10 age emission limitation under subsection (a) shall pay an
11 excess emissions penalty determined under paragraph (2).

12 “(2) The excess emissions penalty for mercury shall
13 be an amount equal to \$50,000 for each pound of mercury
14 emitted in excess of the applicable annual average emis-
15 sion limitation under subsection (a). Such penalty shall
16 be prorated for each fraction of a pound.

17 “(f) BEST PRACTICES.—(1) Effective, January 1,
18 2015, if the owner or operator of any affected unit fails
19 to achieve the annual average emission limitation under
20 subsection (a)(2), such owner or operator may notify the
21 Administrator of such failure prior to March 1, 2015, and
22 request an alternate emissions limitation for mercury with
23 respect to such affected unit. Such owner or operator shall
24 submit to the Administrator mercury emissions data
25 measured by a CEMS that complies with subsection (d)

1 for evaluation. If the Administrator determines that such
2 owner or operator has properly installed and operated
3 such CEMS and control technology designed to achieve
4 such annual average emission limitation and is unable to
5 meet such limitation, the Administrator may, not later
6 than April 1, 2016, establish an alternate emissions limi-
7 tation for mercury with respect to such affected unit based
8 on the optimal performance of properly installed and oper-
9 ated control technology.

10 “(2) With respect to any affected unit, for any year
11 for which an alternate emissions limitation for mercury
12 is in place for such affected unit, the Administrator may
13 review such alternate emissions limitation and impose a
14 more stringent emissions limitation for mercury for the
15 subsequent year based on new data regarding the dem-
16 onstrated control capabilities of the type of control tech-
17 nology installed and operated at such affected unit.

18 “(3)(A) Except as provided in subparagraph (B), an
19 owner or operator of an affected unit failing to achieve
20 the annual average emission limitation under subsection
21 (a)(2) that notifies the Administrator of such failure and
22 requests and alternate emissions limitation for mercury
23 pursuant to paragraph (1) shall be considered in compli-
24 ance with this section (and not subject to any excess emis-
25 sions penalty) for the period beginning on January 1,

1 2015, and ending on the date such an alternate emissions
2 limitation is implemented.

3 “(B) An owner or operator described in subparagraph
4 (A) shall pay an excess emissions penalty, as determined
5 under subsection (e)(2), for the period described in such
6 subparagraph, if such owner or operator operates or main-
7 tains the affected unit, including any associated air pollu-
8 tion control equipment, in a manner that is inconsistent
9 with good air pollution control practices for the minimiza-
10 tion of mercury emissions, as determined by the Adminis-
11 trator. In determining whether the owner or operator of
12 the affected unit operates and maintains the affected unit
13 in a manner that is consistent with good air pollution con-
14 trol practices for the minimization of mercury emissions,
15 the Administrator may review the emissions monitoring
16 data and operating and maintenance procedures of the af-
17 fected unit and may inspect the affected unit.

18 “(4)(A) With respect to any affected unit for which
19 an alternate emissions limitation for mercury is in place
20 under this subsection, the owner or operator of such af-
21 fected unit that emits mercury in excess of such alternate
22 emissions limitation shall pay an excess emissions penalty
23 determined under subparagraph (B).

24 “(B) The excess emissions penalty for mercury for
25 an owner or operator of an affected unit described in sub-

1 paragraph (A) shall be an amount equal to \$50,000 for
2 each pound of mercury emitted in excess of the alternate
3 emissions limitation for mercury in place for such affected
4 unit. Such penalty shall be prorated for each fraction of
5 a pound.

6 “(g) SOLE LIMITATION ON MERCURY.—This title
7 shall apply the sole emission standard or limitation under
8 this Act with regard to the emission of mercury from elec-
9 tric utility steam generating units and shall supersede any
10 other such requirement under section 112 or any other
11 provision of this Act.

12 “(h) RELATIONSHIP TO OTHER LAW.—Except as
13 otherwise specifically provided in this title, nothing in this
14 title precludes a State or political subdivision of a State
15 from adopting or enforcing any additional requirements
16 for the control or abatement of mercury emissions, except
17 that no State or political subdivision thereof shall adopt
18 or attempt to enforce any standard relating to the reduc-
19 tion or control of mercury emissions from electric utility
20 steam generating units that is less stringent than the
21 standards provided in this title.”.

